

Citation: Title 401, Chapter 5, Regulation 030, 401 KAR 5:030, 401 KAR 5:030
Jurisdiction: Kentucky **Document Date:** December 8, 1999 **Page Count:** 3
Section Title: 1 Implementation of Antidegradation Policy (Integrated)
Subject water, water quality, policy, water classification, surface water, effluent
Terms: limitation, permitting, storm water, exemption, application, analysis,
prohibition, discharge, protection
Source: Integrated Document

[401 KAR 5:030](#). Antidegradation Policy Implementation Methodology.

RELATES TO: KRS 146.200 to 146.360, 146.410 to 146.535, 146.550 to 146.570, 146.600 to 146.619, 146.990, 224.01-100, 224.01-400, 224.16-050, 224.16-070, 224.40, 224.43, 224.46, 224.50, 224.60, 224.70, 224.71, 224.73.

STATUTORY AUTHORITY: 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-110, [40 CFR Part 131](#), [16 USC 1271 et seq.](#), [1531 et seq.](#), 33 USC 1311, 1313, 1314, 1316, 1341, 1342

NECESSITY, FUNCTION AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of all water pollution. KRS 224.70-100 declares that the policy of the Commonwealth is to conserve its waters for legitimate uses and to: safeguard from pollution the uncontaminated waters of the Commonwealth, prevent the creation of any new pollution in the waters of the Commonwealth, and abate any existing pollution. [This administrative regulation](#) and 401 KAR 5:002, [5:026](#), [5:029](#), and 5:031 establish procedures to protect the surface waters of the Commonwealth, and thus protect water resources. [This administrative regulation](#) establishes a methodology to implement the antidegradation policy contained in [401 KAR 5:029](#) by establishing procedures to control water pollution in waters affected by that policy.

Section 1. Implementation of Antidegradation Policy.

The following procedures shall govern implementation of the antidegradation policy of [401 KAR 5:029, Section 1](#), for a point source discharge.

(1) Categorization. Surface waters shall be placed into one (1) of three (3) categories:

(a) Outstanding national resource waters:

1. Surface water that meets, at a minimum, the requirements for an outstanding state resource water classification found in [401 KAR 5:031 Section 7](#); and
2. Surface water that demonstrates to be of national ecological or recreational significance.

(b) Exceptional waters:

1. Surface water designated as a Kentucky Wild River, unless it is categorized as an outstanding national resource water;
2. Outstanding state resource water that does not support a federally threatened or endangered aquatic species;

3. Surface water that fully supports all applicable designated uses and contains:
 - a. A fish community that is rated "excellent" by the use of the index of Biotic Integrity included in "Methods for Assessing Biological Integrity of Surface Waters", incorporated by reference in [Section 4](#) of this administration regulation; or
 - b. A macroinvertebrate community that is rated "excellent" by the Macroinvertebrate Bioassessment Index included in "A Macroinvertebrate Bioassessment Index for Streams of the Interior Plateau Ecoregion in Kentucky", incorporated by reference in [Section 4 of this administrative regulation](#); and
4. Water in the cabinet's reference reach network.
 - (c) Use-protected waters. Use-protected water is water not listed in [Section 3 of this administrative regulation](#) as outstanding national resource water or exceptional water.
 - (2) Procedure for implementing the antidegradation policy in outstanding national resource waters.
 - (a) Water quality shall be maintained and protected in outstanding national resource waters,
 - (b) The cabinet may approve temporary or short-term changes in water quality if the changes to the waters in question have no demonstrable impact on the ability of the waters to support their designated uses.
 - (3) Procedure for implementing the antidegradation policy in exceptional waters.
 - (a) A KPDES permit for an unpermitted or expanded discharge shall contain effluent limitations for the entire effluent that are as follows:
 1. Domestic discharges shall have an effluent quality of:
 - a. No greater than ten (10) mg/l five (5) day carbonaceous biochemical oxygen demand;
 - b. No greater than two (2) mg/l ammonia-nitrogen;
 - c. No greater than 0.010 mg/l total residual chlorine;
 - d. No greater than ten (10) mg/l total suspended solids;
 - e. No greater than one (1) mg/l total phosphorus;
 - f. A minimum seven (7) mg/l total dissolved oxygen;
 - g. A chronic whole effluent toxicity limit unless an acute whole effluent toxicity limit is more stringent;
 - h. A geometric mean value for fecal coliform bacteria not to exceed 200 colonies per 100 milliliters during a period of thirty (30) consecutive days or 400 colonies per 100 milliliters during a period of seven (7) consecutive days; and
 - i. The discharge shall not cause the average instream dissolved oxygen concentration to be less than six and zero-tenths (6.0) mg/l.
 2. Chloride limits shall be based on the domestic water supply criterion of 250 mg/l.
 3. Stormwater discharges shall be exempt from antidegradation implementation procedures for exceptional waters, but shall be subject to control by existing cabinet programs.
 4. Chronic whole effluent toxicity limits shall apply unless an acute whole effluent toxicity limit is more stringent.
 5. Waste discharges that are not domestic waste or stormwater discharges shall be restricted to no more than one-half (1/2) of the limitation that would have been permitted for use protected waters at standard design conditions.
 6. KPDES permit renewals that result in less than a twenty (20) percent increase in pollutant loading are exempt from implementation procedures for exceptional waters and

shall be regulated by the requirements in subsection (4)(a) and (b) of [this administrative regulation](#).

(b) If the permit applicant determines that it can meet effluent limitations required by paragraph (a) of this subsection, the KPDES permit shall be issued with the effluent limitations without further antidegradation review as described in subsection (4) of this section for use protected waters. If a KPDES permit applicant cannot meet the effluent limitations the applicant may request a less stringent limitation. In making this request, the applicant shall demonstrate to the satisfaction of the cabinet that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located following the guidelines in "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 incorporated by reference in [Section 4 of this administrative regulation](#) and include an alternatives analysis that shall consider the following:

1. Discharge to other treatment facilities;
2. Use of other discharge locations;
3. Water reuse or recycle;
4. Process and treatment alternatives; and
5. On-site or subsurface disposal.

In allowing the resultant lowering of water quality, the cabinet shall assure water quality necessary to fully protect existing uses.

(c) Zones of initial dilution are prohibited in exceptional waters unless assigned before the effective date of [this administrative regulation](#).

(4) Procedure for implementing the antidegradation policy in use protected waters for point source discharges. All surface waters not listed in [Section 3 of this administrative regulation](#) as outstanding national resource waters or exceptional waters shall be categorized as use-protected waters.

(a) All existing uses shall be protected and the level of water quality necessary to protect the uses shall be assured in use-protected water.

(b) The process to allow a discharge to a use-protected water and to assure the water's protection is regulated by the requirements in the Kentucky Pollution Discharge Elimination System Program.

(5) The antidegradation procedures shall not preempt the power or authority of a local government to provide by ordinance for a higher level of protection through antidegradation implementation for dischargers located within that local government's jurisdiction to surface waters of the Commonwealth.

Citation: Title 401, Chapter 5, Regulation 030, 401 KAR 5:030, 401 KAR 5:030

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Document Date: December 8, 1999

Page Count: 2

Section Title: 2 Procedure for Recategorizing Waters (Integrated)

Subject water, water quality, water classification, surface water, administrative,

Terms: public notification, public participation, hearing, petition

Source: Integrated Document

Section 2. Procedure for Recategorizing Waters.

This section shall apply to the recategorization of surface waters to outstanding national resource waters and exceptional waters. The redesignation of waters to outstanding state resource waters shall be governed by the procedures in [401 KAR 5:026](#).

(1) The cabinet may propose to recategorize certain waters to outstanding national resource waters and exceptional waters.

(a) If the cabinet proposes to recategorize these waters, it shall provide notice and an opportunity for public hearing.

(b) The cabinet shall provide the documentation requirements of this section for those surface waters it proposes to recategorize.

(2) A person may request recategorization of a surface water to an outstanding national resource water or exceptional water by filing a petition with the cabinet.

(a) The petition shall include the name and address of the petitioner and the information and documentation necessary to recategorize the particular water as required by subsection (4) of this section;

(b) The petitioner shall have the burden of proof that the recategorization is appropriate.

(c) The cabinet shall provide notice of the petition and an opportunity for a public hearing.

(d) The cabinet shall review the petition, supporting documentation, and any comments received from the public to determine if the proposed water qualifies for recategorization.

(e) The cabinet shall document the determination to grant or deny recategorization as a result of a petition, and shall provide a copy of the decision to the petitioner and other interested parties.

(3) If a water is to be recategorized the cabinet shall publish notice of the recategorization. Any permit issued after the date of publication shall be issued with limitations based on the new category. When the cabinet reviews its water quality standards pursuant to the provisions of Section 303 of the Clean Water Act, the cabinet shall propose to have all recategorized waters promulgated as an amendment to [this administrative regulation](#).

(4) The following information, documentation, and data shall support a petition for recategorization:

(a) A petition for outstanding national resource waters shall include:

1. A United States Geological Survey 7.5 minute topographic map or its equivalent as approved by the cabinet showing those surface waters to be recategorized including a description consisting of a river mile index with any existing and proposed discharge points;
2. Existing uses and water quality data for the surface waters for which the recategorization is proposed. If adequate data are unavailable, additional studies may be required by the cabinet;
3. Descriptions of general land uses and specific land uses adjacent to the surface waters for which the recategorization is proposed;
4. The existing and designated uses of the waters upstream and downstream of the proposed recategorized waters;
5. General physical characteristics of the surface water including width, depth, bottom composition, and slope;

6. The frequency of occasions when there is no natural flow in the surface water, and the 7Q(10) and harmonic mean flow values for the surface water and adjacent surface waters;
 7. An assessment of the existing and potential aquatic life habitat in the surface waters under consideration and the adjacent upstream surface waters. The existing aquatic life shall be documented including the occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota;
 8. A documented rationale as to why the waters quality for the recategorization; and
 9. The rationale used to support the national significance of the water.
- (b) A petition for exceptional waters shall include the following:
1. A United States Geological Survey 7.5 Minute Topographic Map or its equivalent as approved by the cabinet showing the surface waters to be recategorized including a description consisting of a river mile index with existing and proposed discharge points;
 2. Descriptions of general land uses, including mining, agricultural, recreational, low, medium, and high density residential, commercial, and industrial, and specific land uses adjacent to the surface waters for which the recategorization is proposed;
 3. The frequency of occasions when there is no natural flow in the surface water, and the 7Q(10) and annual mean flow values for the surface water; and
 4. Fish or benthic macroinvertebrate collection data and an Index of Biotic Integrity or Macroinvertebrate Bioassessment Index calculation from a waterbody if criteria specified in [Section 1\(3\)\(c\) of this administrative regulation](#) are utilized.

Citation: Title 401, Chapter 5, Regulation 030, 401 KAR 5:030, 401 KAR 5:030
Jurisdiction: Kentucky **Document Date:** December 8, 1999 **Page Count:** 4
Section Title: 3 Surface Water Categories (Integrated)
Subject Terms: water, water quality, water classification, surface water, administrative
Source: Integrated Document

Section 3. Surface Water Categories.

Surface waters categorized for antidegradation purposes are listed in the following tables. The county column indicates the county in which the mouth outlet of the surface water is located.

Surface Waters Categorized as Outstanding National Resource Waters

Stream	Zone	County
Red River	River Mile 68.6 to River Mile 49.2	Menifee/ Wolfe
Underground River System	Within Mammoth Cave National Park Boundary	Edmonson/ Hart/Barren
Big South Fork of Cumberland	River Mile 55.2 to River Mile 45.0	McCreary

River

Surface Waters Categorized as Exceptional Waters

Stream	Zone	County
Little Sandy River Basin		
Arabs Fork*	Source to Clay Fork	Carter
Big Caney Creek*	Source to Grayson Lake	Elliott
Big Sinking Creek*	Source to River Mile 10.7	Carter
Laurel Creek*	Source to River Mile 7.6	Elliott
Licking River Basin		
Blackwater Creek	River Mile 11.4 to River Mile 3.8	Morgan
Bucket Branch*	Source to North Fork of Licking River	Morgan
Devils Fork*	Source to North Fork of Licking River	Morgan
Licking River	River Mile 165.0 to River Mile 154.5	Bath/Rowan
North Fork of Licking River*	Source to River Mile 13.0	Morgan
Kentucky River Basin		
Buffalo Creek*	River Mile 12.8 to River Mile 0.8	Owsley
Cavanaugh Creek	River Mile 5.3 to South Fork of Station Camp Creek	Jackson
Clear Creek*	Source to River Mile 4.1	Woodford
Clemons Fork*	Source to Buckhorn Creek	Breathitt
Coles Fork*	Source to Buckhorn Creek	Breathitt
Drennon Creek*	River Mile 11.9 to River Mile 10.5	Henry
East Fork of Indian Creek*	Source to West Fork of Indian Creek	Menifee
Elisha Creek*	Source to River Mile 0.95	Leslie
Gladie Creek*	Source to Red River	Menifee
Goose Creek	Laurel Creek to Red Bird River	Clay
Hardwick Creek	Little Hardwick Creek to Red River	Powell
Indian Creek*	River Mile 4.7 to River Mile 0.55	Carroll
Line Fork	River Mile 27.5 to River Mile 17.3	Letcher
Lulbegrud Creek	Falls Branch to Red River	Clark/

	Powell	
Middle Fork of Kentucky River	Upper Twin Creek to North Fork of Kentucky River	Lee
Middle Fork of Kentucky River	Greasy Creek to Buckhorn Reservoir backwaters	Leslie
Mussleman Creek*	River Mile 8.4 to River Mile 2.6	Grant
Red Bird River	Big Creek to Goose Creek	Clay
Right Fork of Buffalo Creek*	Source to Buffalo Creek	Owsley
South Fork of Kentucky River	Sexton Creek to River Mile 11.3	Owsley
South Fork of Red River	Sand Lick Fork to Middle Fork of Red River	Powell
South Fork of Station Camp Creek*	Source to River Mile 5.3	Jackson
Station Camp Creek*	River Mile 22.3 to River Mile 19.0	Estill
Sturgeon Creek*	Source to River Mile 4.0	Lee
Sugar Creek*	Source to River Mile 0.8	Leslie
Wolfpen Creek*	Source to Red River	Meniffee

Salt River Basin

Salt Lick Creek*	Source to River Mile 5.3	Marion
Wilson Creek*	Source to River Mile 12.2	Bullitt

Green River Basin

Beaverdam Creek*	Source to River Mile 7.6	Edmonson
Caney Fork*	Source to River Mile 0.85	Barren
Falling Timber Creek*	River Mile 16.0 to River Mile 11.5	Metcalf
Gasper River*	Source to River Mile 32.3	Logan
Goose Creek*	Source to River Mile 5.6	Casey
Green River	River Mile 207.8 to River Mile 181.7	Edmonson
Lick Creek*	Source to River Mile 5.3	Simpson
Otter Creek*	Source, including East and Middle Fork, to River Mile 1.75	Larue
Peter Creek*	River Mile 18.05 to River Mile 13.05	Barren
Russell Creek*	Source to River Mile 23.8	Adair
Trammel Fork*	River Mile 30.15 (Kentucky-Tennessee State Line) to River Mile 19.4	Allen

Lower Cumberland River Basin

West Fork of Red River*	River Mile 26.5 to River Mile 16.3	Christian
Whipporwill Creek*	Source to Red River	Logan

Tennessee River Basin

Blood River*	River Mile 15.65 (Kentucky-Tennessee State Line) to River Mile 15.1	Calloway
Panther Creek*	Source to River Mile 1.2	Calloway
Soldier Creek*	River Mile 5.3 to River Mile 2.6	Marshall

Tradewater River Basin

Sandlick Creek*	Source to River Mile 3.5	Christian
Tradewater River*	Source to River Mile 126.0	Christian

Ohio River Basin (Main Stem and Minor Tributaries)

Yellowbank Creek*	Source to River Mile 4.4	Breckinridge
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Lakes and Reservoirs

Metropolis	Entire Lake	McCracken
Swan	Entire Lake	Ballard

Mississippi River Basin (Main Stem and Minor Tributaries)

Murphy's Pond	Entire Pond and Preserve Area	Hickman
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Upper Cumberland River Basin

Bad Branch*	Source to Poor Fork of Cumberland River	Letcher
Bark Camp Creek*	Source to River Mile 2.6	Whitley
Buck Creek*	River Mile 62.6 to River Mile 28.9	Pulaski
Cane Creek*	Source to River Mile 7.0	Laurel
Cumberland River	River Mile 574.6 to River Mile 558.5 (Headwaters of Lake Cumberland)	McCreary/ Whitley
Eagle Creek*	Source to River Mile 3.0	McCreary
Horse Lick Creek*	Source to River Mile 12.3	Jackson
Little South Fork of Cumberland River	River Mile 35.6 to River Mile 4.1	Wayne
Marsh Creek*	Source to River Mile 12.6	McCreary
Martins Fork of Cumberland River	River Mile 31.3 to River Mile 27.4	Harlan
Rock Creek	Tennessee-Kentucky State Line (River Mile 21.9) to White Oak Creek	McCreary
Rockcastle River	River Mile 24.4 to River Mile 8.5	Laurel/ Pulaski
South Fork of Dog Slaughter	Source to Dog Slaughter Creek	Whitley

Creek*

* Waterbodies in the cabinet's reference reach network

Citation: Title 401, Chapter 5, Regulation 030, 401 KAR 5:030, 401 KAR 5:030
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Section Title: 4 Incorporation by Reference (Integrated)
Subject Terms: water, water quality, water classification, surface water, reference
Source: Integrated Document

Section 4. Incorporation by Reference.

(1) The following material is incorporated by reference:

- (a) "Methods for Assessing Biological Integrity of Surface Water", October 1993, Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet;
 - (b) "A Macroinvertebrate Bioassessment Index for Streams of the Interior Plateau Ecoregion in Kentucky", June 1999, Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet;
 - (c) "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.
- (2) This material may be inspected, copied, or obtained at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m.

(21 Ky.R. 2843; Am. 89, 280; eff. 7-12-95; 26 Ky.R. 145, 819, 1144, eff. 12-8-99.)